

Please amend the claims as follows:

B¹

83. (Once amended) The method of claim 106, wherein said transcriptional regulatory sequence is a promoter.

B²

88. (Once amended) The method of claim 106, further comprising introducing double strand breaks into the genomic DNA of said cell prior to or simultaneously with integration of said vector.

B³

92. (Once amended) The method of claim 106, wherein said vector is linear.

B⁴

100. (Once amended) The method of claim 106, wherein said endogenous cellular gene encodes a transmembrane protein.

101. (Once amended) The method of claim 106, further comprising isolating and cloning said cell prior to introducing said cell into an animal.

102. (Once amended) The method of claim 106, wherein said animal is a mammal.

Please add the following new claims:

106. (New) A method for over-expressing protein encoded by an endogenous cellular gene or portion thereof in a cell introduced into an animal, said method comprising:

(a) introducing a vector comprising a transcriptional regulatory sequence into a cell *in vitro*;

(b) maintaining the cell in (a) containing the introduced vector under conditions appropriate for non-homologous recombination of the vector with the genome of the cell thereby producing a non-homologously recombinant cell wherein the transcriptional regulatory sequence on the vector is operably linked to said endogenous cellular gene; and

35 (c) introducing said non-homologously recombinant cell of step (b) into an animal and maintaining the non-homologously recombinant cell in said animal under conditions appropriate for over-expression of said protein encoded by said endogenous cellular gene or portion thereof, said over-expression being the result of upregulation of said gene by said transcriptional regulatory sequence, thereby over-expressing said protein encoded by said endogenous cellular gene in said cell introduced into said animal to produce said protein encoded by said endogenous cellular gene.

107. (New) A method for detecting over-expression of an endogenous cellular gene in a cell introduced into an animal, said method comprising:

(a) introducing a vector comprising a transcriptional regulatory sequence into a cell *in vitro*;

(b) maintaining the cell in (a) containing the introduced vector under conditions for non-homologous recombination of the vector with the genome of the cell thereby producing a non-homologously recombinant cell wherein the transcriptional regulatory sequence on the vector is operably linked to an endogenous cellular gene;

B⁵ (c) introducing said non-homologously recombinant cell in step (c) into an animal and maintaining the non-homologously recombinant cell in said animal under conditions appropriate for over-expression of said endogenous cellular gene or a portion thereof, said over-expression being the result of upregulation of said gene by said transcriptional regulatory sequence, thereby over-expressing said endogenous cellular gene in said cell introduced into said animal to produce an expression product of said endogenous cellular gene; and

(d) detecting said over-expression.

REMARKS

I. Status of the Claims

Claims 83-88 , 92, 100-103, 106 and 107 are pending in the present application. The claims have been amended to provide corrected antecedent basis. New claims 106 and 107 have been added that find their support in original claim 81. These claims have been amended to provide active process limitations, as well as to address the Examiner's rejections under 35 U.S.C. § 112, second paragraph. Accordingly, no new matter has been added with these amendments.